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OFFICE OF SECRETARY

In the Matter of

Access Charge Reform

Price Cap Performance Review  
for Local Exchange Carriers

Transport Rate Structure and Pricing

Usage of the Public Switched Network  
by Information Service and Internet  
Access Providers

CC Docket No. 96-262

CC Docket No. 94-1

CC Docket No. 91-213

CC Docket No. 96-263 ✓

**REPLY COMMENTS BY SOUTHWESTERN BELL TELEPHONE COMPANY,  
PACIFIC BELL, AND NEVADA BELL ON THE NOTICE OF INQUIRY**

DURWARD D. DUPRE  
MARY W. MARKS  
THOMAS A. PAJDA

One Bell Center  
Room 3536  
St. Louis, Missouri 63101

ATTORNEYS FOR  
SOUTHWESTERN BELL  
TELEPHONE COMPANY

MARLIN D. ARD  
JEFFREY B. THOMAS

140 New Montgomery Street  
Room 1529  
San Francisco California 94105

ATTORNEYS FOR PACIFIC BELL  
AND NEVADA BELL

Date: April 23, 1997

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## **SUMMARY**

The issues in this proceeding are big and rapidly getting bigger. Neither the industry nor regulators can escape them. As more people subscribe to Internet access services, usage on the voice network will likely mushroom. Southwestern Bell Telephone Company's ("SWBT's") network studies produced conservative projections indicating that usage, measured in CCS (hundred call seconds), will double by 2001, and aggressive projections indicating that this usage will quadruple by 2001. The amount of traffic already subject to the ESP exemption from access charges has become so large, with growth of the Internet, that both large and small IXCs admit they cannot resist the irrational and uneconomic arbitrage opportunities that the exemption has created for their own traffic. These irrational opportunities will drive IXCs to move increasing amounts of their existing data, and then voice, traffic to the Internet, not because it is more efficient but because doing so allows them to avoid paying access charges. This uneconomic migration of traffic away from access services will frustrate the Commission's Access Reform goals.

The comments show that ESPs' use of local business services under the ESP exemption is also creating confusion for local interconnection policies. It is essential that this confusion not allow ESPs to continue to gain even greater preferential treatment and spread that preferential treatment to competitive LECs ("CLECs").

ESPs are rapidly expanding their use of CLECs as intermediate carriers between the ESPs' and the incumbent LECs' ("ILECs") central offices. This expansion

would be beneficial if it were the result of unrestricted marketplace competition, but it is not. Instead, it is the result of ESPs and CLECs treating what is actually interstate access traffic as if it were local traffic in order to gain virtually free wide-area access without deploying facilities in every local calling area, by taking advantage of CLEC aggregation of local traffic. As a result of this confusion and misapplication of traffic, the ESP may avoid paying the costs of that access. This results from a combination of the ILEC's potential payment of "reciprocal" compensation to the CLEC for terminating the ESP's supposedly "local" traffic, and the lack of any ESP originating traffic for which the CLEC would pay the ILEC. Since most IXCs are also CLECs, the ESP-exemption-induced arbitrage, of which IXCs have warned, can be expected to rapidly expand the traffic subject to these intermediate carrier arrangements.

As a result of this combination of regulatory policies and resulting confusion, interconnection arrangements that were designed for the purpose of fostering local competition may instead continue to produce unfair competitive advantages and revenue windfalls for CLECs' and ESPs' interstate traffic, if the Commission does not clarify the issues and help enforce access charge policies. Removal of the ESP exemption would help remove the confusion by requiring ESPs to use interstate access tariffs, thus eliminating any claim that this is local traffic. Other clarifications and enforcement assistance recommended below would still be needed. At a minimum, however, the Commission should reassert that reciprocal compensation principles apply only to local calls and clarify that reciprocal compensation does not apply to the traffic of the ESPs that is subject to the ESP exemption.

Most IXC's agree with ILECs that removal of the ESP exemption is essential in order to have cost causers pay for the costs they cause. The comments show that, if the ESP exemption from access charges and its uneconomic arbitrage opportunities continue, the result will be higher prices for consumers and harm to our nation's economy. There will be 1) continued shortfalls of LEC revenues from Internet traffic compared to the costs of that traffic and, thus, fewer funds available for new services and network development, 2) pressure on remaining access customers to implicitly subsidize the ESPs and arbitragers via higher rates, 3) continued congestion on the voice network and inefficient expansion of the voice network for use of data, 4) continued disincentives for use and development of efficient data services, and 5) reductions in IXC's contributions to universal service funding, as IXC's move increasing amounts of their traffic to the Internet in order to take advantage of the ESP exemption.

The Commission should reject the arguments of those parties that seek to retain the ESP exemption that benefits them via price controls at the expense of others in the industry and consumers. The Commission should take the following steps:

1. The Commission should recognize ESPs as users of access services and remove the ESP exemption in the pending Access Reform Order. ESPs should pay the cost of the LEC carrying the call. This action, by itself, is not sufficient to rectify the problems, but removal of the exemption will properly clarify that ESP traffic is interstate traffic subject to the Commission's access rules. Removal of the ESP exemption must be associated with the other steps below.
  - The Commission should apply the revised switched access structure proposed in SWBT's and Pacific Telesis's comments in the Access Reform Proceeding. If subsidies remain for a time in access generally, the Commission can waive ESP payments of carrier common line charges, transitional interconnection charges, and reserve deficiency

amortization charges, so that ESPs pay only the costs of the LEC carrying the call.

2. The Commission should make it clear that reciprocal compensation does not apply to calls terminated to ESPs since those one-way calls involve interstate and international access, not local service interconnection. Even with the ESP exemption in place, it should be noted that the Commission's ESP exemption permits ESPs to use local business services for interstate traffic. The exemption does not change the nature of the service, only how it is purchased.
3. If two local network providers (an ILEC and a CLEC, or two CLECs) are involved in the call to the ESP, then the ESP's access charge payment must be shared by the network providers based on the network configuration involved, in a way that is similar to "meet-point billing" for switched access.
4. ESPs' numbers that are used for access must be listed in a data base in order to ensure that ESPs pay access charges, that those charges are appropriately shared when more than one carrier provides access for the ESP, and that reciprocal compensation does not apply. This identification is necessary because although ESPs use local numbers the traffic is interstate and terminating compensation does not apply.

These steps will remove price controls and, thus, will avoid the uneconomic arbitrage incentives that threaten the Commission's goals and will unleash the investment needed to build new data services and networks. This, in turn, will allow the next wave of information services growth and the realization of the Internet promise to bring ubiquitous, high-speed access to information for all members of society and increased economic growth for our nation.

There is widespread agreement among the commenting parties that

1) Internet access and enhanced services in general should not be regulated, 2) data traffic should be encouraged to move off the PSTN and onto new and more efficient data networks, and 3) unrestricted market forces are the best means of creating efficiency benefits for consumers and the economy. Nonetheless, many ESPs



encourage the Commission to retain regulations, such as the ESP exemption, that preserve their implicit subsidies and keep Internet traffic on the PSTN. A few of these ESPs also seek to receive direct benefits of 1) interconnection, 2) access to unbundled network elements, 3) collocation, or 4) universal service funding, which the Telecommunications Act of 1996 (the "Telecommunications Act" or "Act") established for telecommunications carriers. These ESPs want to receive these benefits without bearing any of the responsibilities that the Act places on telecommunications carriers. The Commission should reject these proposals for new forms of unreasonable discrimination in favor of ESPs that would violate the Act and frustrate the Commission's goals.

In addition, some parties want the Commission to heavily regulate the ILECs' offerings and pricing of services in ways that would prevent ILECs from being effective competitors and jeopardize the quality of existing service. For instance, some parties use this proceeding to revisit proposed requirements for subloop unbundling that were considered by the Commission in the past, and yet these parties do not address the network reliability issues that have rightly concerned the Commission and the ILECs. Moreover, these proposed new requirements would be applied to the ILECs' new, competitive technologies and services, and thereby frustrate marketplace incentives for ILECs to make the investments in new services.

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PACIFIC BELL, AND NEVADA BELL ON THE NOTICE OF INQUIRY**

Southwestern Bell Telephone Company ("SWBT"), Pacific Bell, and  
Nevada Bell file these reply comments in response to comments on the Commission's  
Notice of Inquiry ("NOI") in CC Docket No. 96-263.<sup>1</sup>

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<sup>1</sup> These reply comments are submitted on behalf of SWBT and all subsidiaries of the recently merged entity formerly known as Pacific Telesis Group, including Pacific Bell and Nevada Bell. SWBT is an incumbent local exchange carrier ("ILEC") in the states of Arkansas, Kansas, Missouri, Oklahoma, and Texas. Pacific Bell is an ILEC in California. Nevada Bell is an ILEC in Nevada.

**I. INTRODUCTION -- THE TELECOMMUNICATIONS ACT GOALS CONCERNING ACCESS, INTERCONNECTION, AND UNIVERSAL SERVICE ARE AT STAKE**

**A. The Commission Must Terminate Preferential Treatment Of ESPs Before Uneconomic Arbitrage Opportunities Cause Severe Harm**

Review of the comments in this proceeding reveals that numerous public interest goals require the removal of the enhanced services provider ("ESP") exemption from paying access charges. The exemption has long favored ESPs over interexchange carriers ("IXCs") even though ESPs, like IXCs, are users of interexchange access. In states with low flat-rated pricing for local exchange services, the ESP exemption provides ESPs, including Internet service providers ("ISPs"), with low, subsidized prices for the same network functions that must be paid for on a usage-sensitive basis by IXCs seeking access to LECs' networks under access tariffs. The amount of traffic subject to the exemption has become so large, with growth of the Internet, that both large and small IXCs admit they cannot resist the irrational and uneconomic arbitrage opportunities that the exemption has created for their own traffic.<sup>2</sup> These irrational opportunities will drive IXCs to move increasing amounts of their existing data, and then voice, traffic to the Internet, not because it is more efficient but because doing so allows them to avoid paying access charges.

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<sup>2</sup> America's Carriers Telecommunication Association ("ACTA") at 6; AT&T at 23. See also MCI at 4.

Nonetheless, most IXCs agree with LECs that removal of the ESP exemption is essential in order to have cost causers pay for the costs they cause.<sup>3</sup> This removal should occur at the same time that the Commission takes steps to reform access charges in its pending Access Reform Order in CC Docket 96-262 and should result in ESPs paying traffic-sensitive usage charges when they choose access services that utilize the public switched telephone network ("PSTN"). The Commission should apply the revised switched access structure proposed in SWBT's and Pacific Telesis's comments in the access reform proceeding. If the removal of subsidies from access charges in general will take time, the Commission can waive ESP payments of carrier common line charges ("CCLC"), transitional interconnection charges ("TIC"), and reserve deficiency amortization payments.

The huge, thriving industry, with exponentially increasing traffic flows, now subject to the ESP exemption stands in sharp contrast to the circumstances that existed when the exemption was created 14 years ago as a transitional method of avoiding "rate shock" in response to ESPs' arguments that their industry was in its infancy.<sup>4</sup> Today, the ESP exemption clearly creates unreasonable discrimination in violation of §§ 201 and 202 of the Communications Act.<sup>5</sup> In addition, as explained in

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<sup>3</sup> ACTA at 3-4; AT&T at ii, iii, 4-8; CompTel at 3; General Communications, Inc. ("GCI") at 2-4; MCI at 4-5; Telecommunications Resellers Association ("TRA") at 4-5.

<sup>4</sup> *MTS and WATS Market Structure*, CC Docket No. 78-72, Phase I, *Third Report and Order*, 93 FCC 2d 241, 265 (1983) ("Access Order"), *modified on reconsideration*, 97 FCC 2d 834 (1984) ("Access Reconsideration Order"), *aff'd in principal part and remanded in part*, *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 737 F.2d 1095, 1137 (D.C. Cir. 1984), *cert. denied*, 469 U.S. 1227 (1985), 100 FCC 2d 1222 (1985), *further reconsideration denied*, 102 FCC 2d 849 (1985).

<sup>5</sup> 47 U.S.C. §§201 & 202.

Pacific Telesis's reply comments in the Access Reform Proceeding, the ESP exemption denies Pacific Bell the opportunity to recover all its costs in what has become a substantial part of its business, and denying that opportunity establishes an unconstitutional taking of Pacific Bell's property.<sup>6</sup> Moreover, the uneconomic effects of the ESP exemption have grown proportionately with the expansion of ESP traffic.

The unreasonable discrimination, the taking of property, and the harmful uneconomic effects on the public caused by the ESP exemption stem from failure to apply the principle that cost causers should pay for the costs they cause. The important considerations for applying this principle are 1) how ESPs actually use the PSTN, not how they should use it or might use it if alternative technologies were available, and 2) whether their payments are consistent with the costs they create. The short answer is that ESPs use the PSTN to connect customers to other networks, particularly the Internet, like IXCs do, and the ESPs' payments do not cover the costs. Accordingly, the ESP exemption must finally be removed.

**B. The ESP Exemption Is Spreading Preferential Treatment To Competitive LECs**

The comments show that confusion caused by ESPs' use of local business services under the ESP exemption risks frustrating local interconnection

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<sup>6</sup> *Access Charge Reform*, CC Docket No. 96-262, February 14, 1997, Reply Comments of Pacific Telesis Group at 29-30.

policies. Because of the confusion, ESPs are gaining even greater preferential treatment, and preferential treatment is spreading to competitive LECs ("CLECs").<sup>7</sup>

ESPs are rapidly expanding their use of CLECs as intermediate carriers between the ESPs' points of presence ("POPs") and the incumbent LECs' ("ILECs") central offices. This expansion would be beneficial if it were the result of unrestricted marketplace competition, but it is not. Instead, it is the result of ESPs treating what is actually interstate access traffic as if it were local in order to gain virtually free wide-area access without deploying facilities in every local calling area by taking advantage of CLEC aggregation of local traffic. As a result of this confusion, the ESP may continue to avoid paying the costs of that access. This can result from a combination of the ILEC's potential payment of "reciprocal" compensation to the CLEC for terminating the ESP's supposedly "local" traffic, and the lack of any ESP originating traffic for which the CLEC would pay the ILEC. Since most IXCs are also CLECs, the ESP-exemption-induced arbitrage, of which IXCs have warned, can be expected to rapidly expand the traffic subject to these intermediate carrier arrangements.

Removal of the ESP exemption would help remove the confusion by requiring ESPs to use interstate access tariffs, thus eliminating any claim that this is local traffic. At least, however, the Commission should reassert that reciprocal compensation principles apply only to local calls and clarify that reciprocal

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<sup>7</sup> Competitive LECs ("CLECs") is the term we use in these reply comments for LECs other than incumbent LECs ("ILECs"). Different states apply different names. For instance, in Pacific Bell's territory they are designated as competitive local carriers ("CLCs"), and in SWBT's territory they are designated local service providers ("LSPs").

compensation does not apply to the traffic of the ESPs that is subject to the ESP exemption.

Even when the ESP exemption is removed, there will be a need to identify ESP traffic to ensure that ESPs are paying access charges. Moreover, with or without removal of the exemption, if two local network providers (an ILEC and a CLEC, or two CLECs) are involved in the call, then the payment from the ESP must be shared based on the network configuration involved, in a way that is similar to "meet-point billing" for switched access, rather than one of them paying the other terminating compensation.

**C. Many Of The Goals Of The Telecommunications Act And Of The Commission Are At Stake**

The comments show that, if the ESP exemption from access charges and its uneconomic arbitrage opportunities continue, the result will be higher prices for consumers and harm to our nation's economy. There will be 1) continued shortfalls of LEC revenues from Internet traffic compared to the costs of that traffic and, thus, fewer funds available for new services and network development, 2) pressure on remaining access customers to implicitly subsidize the ESPs and arbitragers via higher rates, 3) continued congestion on the voice network and inefficient expansion of the voice network for use of data, 4) continued disincentives for use and development of efficient data services, and 5) reductions in IXCs' contributions to universal service funding, as IXCs move increasing amounts of their traffic to the Internet in order to take advantage of the ESP exemption.

**D. The Commission Should Unleash Market Forces In Order To Unchain The Internet From Limitations Of The PSTN And Expand Benefits To Consumers And The National Economy**

There is widespread agreement among the commenting parties that

1) Internet access and enhanced services in general should not be regulated,<sup>8</sup> 2) data traffic should be encouraged to move off the PSTN and onto new and more efficient data networks,<sup>9</sup> and 3) unrestricted market forces are the best means of creating efficiency benefits for consumers and the economy.<sup>10</sup> Nonetheless, many ESPs encourage the Commission to retain regulations, such as the ESP exemption, that preserve their implicit subsidies and keep Internet traffic on the PSTN. A few of these ESPs also seek to receive direct benefits of 1) interconnection, 2) access to unbundled network elements, or 3) universal service funding that the Telecommunications Act of 1996 (the "Telecommunications Act" or "Act") established for telecommunications carriers, without bearing any of the responsibilities that the Act places on those carriers.<sup>11</sup> The Commission should reject these proposals for new forms of unreasonable discrimination in favor of ESPs that would violate the Act and frustrate the Commission's goals.

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<sup>8</sup> See, e.g., America OnLine ("AOL") at 13; General Services Administration and Department of Justice ("GSA") at 3 & 5-6; Information Industry Association ("IIA") at 4; Internet Consumer Parties at 16; Internet Users Coalition ("IUC") at iv and 14; Motorola at 3; Nortel at 5 & 8; SWBT at 14.

<sup>9</sup> See, e.g., AOL at 17-20 & 36; Alliance For Public Technology ("APT") at 5 & 15; AT&T at 9; Internet Access Coalition ("IAC") at 9; IUC at 8, 10-11; Pacific Telesis Group at 3-4, 33-38; SWBT at 2-4, 6-9.

<sup>10</sup> See, e.g., Information Industry Association ("IIA") at 4; Internet Consumer Parties at 16; Motorola at 3; Northern Telecom Inc. ("Nortel") at 5 & 8; Pacific Telesis Group at 12-15; SWBT at 2-4.

<sup>11</sup> See, e.g., IAC at 49; Internet Consumer Parties at 8; IUC at 18.



In addition, some parties want the Commission to heavily regulate the ILECs' offerings and pricing of services in ways that would prevent ILECs from being effective competitors and jeopardize the quality of existing service. For instance, some parties use this proceeding to revisit proposed requirements for subloop unbundling that were considered by the Commission in the past, and yet these parties do not address the network reliability issues that have rightly concerned the Commission and the ILECs.<sup>12</sup> Moreover, these proposed new requirements would be applied to the ILECs' new, competitive technologies and services, and thereby frustrate marketplace incentives for ILECs to make the investments in new services.<sup>13</sup> Instead, the Commission should encourage new investment by allowing all parties the opportunity for rewards that are commensurate with the risks taken.

In sum, the comments show that at stake in this proceeding are fundamental goals concerning access, interconnection, universal service, and the development and use of telecommunications networks. Thus, the comments show that the Commission is correct that issues concerning "the development of the Internet and other information services raise many critical questions that...[u]ltimately...concern no less than the future of the public switched telephone network in a world of digitalization and growing importance of data technologies."<sup>14</sup>

The future of the PSTN and of new networks can be efficient and productive if the Commission quickly removes the ESP exemption from access charges

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<sup>12</sup> AOL at 25; IAC at 26-28; MCI at 12-13; WorldCom at 23.

<sup>13</sup> AOL at 26; IAC at 26-28; WorldCom at 13-15.

<sup>14</sup> NOI at para. 311 (emphasis added).

and other barriers to full competition by all parties, including the ILECs, and avoids the creation of new disincentives for investment in new technologies and services. This approach will allow regulation and the industry to keep up with the rapid changes brought by the explosive growth of the Internet and allow these changes to benefit all consumers and our national economy.

## **II. INTERNET TRAFFIC CAUSES SUBSTANTIAL PSTN CONGESTION**

### **A. Internet Traffic Creates Congestion On The PSTN**

Some parties claim that prior to this proceeding the ILECs had not demonstrated a problem with congestion caused by Internet access usage.<sup>15</sup> They are incorrect about the past demonstrations, but more important is the extensive record that has now been developed in this proceeding. For instance, Pacific Telesis Group filed a White Paper with its comments which presented the results of its assessment of a variety of data sources, including a two-week traffic study of dial-up Internet use at 38 randomly selected switches supporting ESP POPs throughout Pacific Bell's territory.<sup>16</sup>

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<sup>15</sup> See, e.g., CAIS at 8; Internet Consumer Parties at 10; IUC at 22 & 24; WorldCom at 12.

<sup>16</sup> "Surfing the "Second-Wave" -- Sustainable Internet Growth and Public Policy," Pacific Telesis Group, March 24, 1997, Section 3.2, attached as Exhibit A to Pacific Telesis Group's comments in this proceeding ("Pacific Telesis Group's March 1997 Internet White Paper"). Pacific Telesis Group's study included 880,000 calls (both residential and business) to ESPs. Thus, contrary to the assertion of the January 22, 1997 Selwyn/Lazlo Internet Use Study (p. 19), Pacific Bell's study did not rely on "...isolated, worst-case situations in which the specific central offices were selected for examination...."

The findings from Pacific Bell's study demonstrate a number of important points: 1) High Internet usage is not isolated to a few switches in a few central offices; it occurs generally. 2) A small percentage of the users are generating the great majority of minutes of use.<sup>17</sup> 3) The substantially longer average customer use and longer sessions of Internet usage, as compared to voice usage, are causing congestion problems now and, as more people subscribe to Internet access services, usage on the voice network will likely mushroom. SWBT's network studies produced conservative projections indicating that usage, measured in CCS (hundred call seconds), will double by 2001, and aggressive projections indicating that this usage will quadruple by 2001.<sup>18</sup>

**B. Changing The Network To Avoid Congestion Is Expensive**

IAC states that instances of congestion "can be remedied through simple modifications to the existing circuit-switched network."<sup>19</sup> IAC is wrong. Heavy and unpredictable usage patterns of Internet traffic cause network congestion on the PSTN because local switching offices and interoffice facilities were not engineered for this type of traffic but for the predictable usage patterns of voice traffic.<sup>20</sup> These patterns allow ILECs to predict the amount of network resources required and to expand the PSTN efficiently by sharing network resources among different types of customers. Making quick changes to accommodate Internet traffic is much more difficult and

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<sup>17</sup> This point is supported by the January 22, 1997 Selwyn/Lazlo Internet Use Study at p. 26 ("On average approximately 10% of ESP users account for between 60% and 70% of total ESP hours of use.")

<sup>18</sup> SWBT at 10.

<sup>19</sup> IAC at 10.

<sup>20</sup> See Pacific Telesis Group's March 1997 Internet White Paper at Section 3.1.

expensive. IAC states that the Internet congestion "can be easily addressed using techniques such as load balancing and switch deloading."<sup>21</sup> Actually, addressing congestion is a costly and complex undertaking.<sup>22</sup> Rebalancing is expensive but, more important, large investment in new equipment and facilities is often required because of the large amount of Internet traffic flowing through the network. SWBT and Pacific Bell combined conservatively estimate that costs to support Internet traffic using the current operational methods, including the deloading of switches and adding of resources, will be nearly \$1 billion over the next five years, simply to keep the circuit-switched network working effectively.<sup>23</sup>

**C. Internet Traffic Increasingly Affects Peak Usage Of The PSTN**

Some parties argue that Internet traffic does not increase ILEC's costs because the peak Internet hour is not identical with the peak residential or business calling hour.<sup>24</sup> These parties are wrong concerning ILEC's costs, not only because they ignore the substantial operational expenses and investments discussed in Subsection B above, but also because they misconstrue the nature of peak usage.

Although Pacific Bell's traffic study indicated that the dial-up Internet peak busy-hour is typically around 10 to 11 p.m., this pattern is inconsistent. Examples of congestion in Pacific Bell's territory show that the Internet peak busy-hour is less

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<sup>21</sup> IAC at 10.

<sup>22</sup> SWBT at 8.

<sup>23</sup> *Id.* at 10-11 and Pacific Telesis Group's March 1997 Internet White Paper at 17.

<sup>24</sup> GSA at 14; IAC at 8-9; Internet Consumer Parties at 9-10; IUC at 26; PaISP at 9.

predictable than the residential voice peak busy-hour. The peak Internet hour has fluctuated dramatically between late afternoon and late evening,<sup>25</sup> while the peak residential voice hour has been found to be consistently around 7 p.m. Since the Internet busy hour range includes the normal residential voice busy hour, they would sometimes occur at around the same time period and push the peak-usage of switches upward. The sum of normal voice plus Internet traffic is creating the congestion problems that require costly voice network investments. Moreover, Internet traffic itself can establish the busy hour.<sup>26</sup> At the end of 1996, Internet usage accounted for approximately 27% of Pacific Bell's total residential traffic, or 30 billion minutes of use.<sup>27</sup> As Internet traffic continues to grow on the PSTN, this traffic will have an ever increasing effect on peak-usage with corresponding cost increases.

**D. Congestion Is A Widespread Concern**

IAC, IUC, and MCI argue that Internet congestion is limited to isolated incidents.<sup>28</sup> Again, these parties are wrong. Congestion concerns are not isolated to a few central offices. Like Internet traffic in general, congestion is widespread and growing. For instance, of the 772 switches in Pacific Bell's network, approximately one-third serve ESP nodes and are therefore vulnerable to congestion. Between March, 1996 and January 1997, 62 of these switches have experienced Internet congestion -- they have exceeded normal network thresholds, and performance has been degraded

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<sup>25</sup> Pacific Telesis Group's March 1997 Internet White Paper at 11-14.

<sup>26</sup> See *id.* at 11-12.

<sup>27</sup> See *id.* at 5.

<sup>28</sup> IAC at 10; IUC at 28; MCI at 21.

below network standards. Congestion increased dramatically at the end of 1996 when America OnLine introduced flat-rate pricing. From December of 1996 through January of 1997, the number of Pacific Bell switches having traffic exceeding normal network thresholds increased from 26 to 62.<sup>29</sup>

**E. The Internet Access Coalition's Argument, Based On The ETI Study, Is Based On A Misunderstanding Of The Costs Of Providing Trunk-Side Services**

Citing the January 22, 1997 Selwyn/Laszlo ETI Study, IAC states, "Virtually all terminating-end congestion problems that result from calls to ESPs/ISPs could be resolved if most ESP/ISPs used trunk-side terminations."<sup>30</sup> This argument is without merit for two reasons. First, many ESPs still choose to use line-side local exchange services, although trunk-side services are rapidly gaining in popularity. ESPs purchase both line-side and trunk-side services under the ESP exemption. Second, with trunk-side local exchange services, congestion still occurs on interoffice facilities and terminating end office switches. Although trunk-side connections are preferable to line-side connections, they consume costly switch and network resources for which ILECs are not compensated under the ESP exemption.

**F. Network Outages Reported To The Network Reliability Council Are Irrelevant To the Internet Traffic Congestion Issue**

Some parties argue that network congestion caused by Internet usage is not a serious issue because the Network Reliability Council ("NRC") has not linked any

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<sup>29</sup> See Pacific Telesis Group's March 1997 Internet White Paper at 10-11.

<sup>30</sup> IAC at 14.

network outages to Internet usage and "saw no indication that Internet traffic presented any immediate reliability threat."<sup>31</sup> This argument is without merit. Internet congestion is a serious problem not only because it may cause outages or a reliability threat, but also because it does cause the need for continuous uncompensated network upgrades in order to ensure against outages and reliability problems.

The outage reports reviewed by the NRC relate primarily to the types of outages that occur as the result of specific media-stimulated calling events, natural disasters, accidents, and fires, that suddenly affect a large number of customers before steps can be taken to prevent the outages. Outage reporting requirements include: equipment outages potentially affecting 30,000 to 50,000 customers, lasting 30 minutes or longer; equipment outages affecting "special" offices and facilities (key government facilities, major military installations, and nuclear power plants); fire-related incidents affecting 1000 or more customers, lasting 30 or more minutes; and E911 outages.<sup>32</sup> On June 2, 1992, the Commission issued a "Clarification of Interim Outage Reporting" adopting a requirement that outage reporting include switch congestion evidenced by continuous, measurable dial tone delay of 85% over 3 seconds for 30 minutes or longer.<sup>33</sup> Congestion resulting from fast growing use of the network for Internet access is unlikely to reach this level of a reportable outage. When network use in a facility

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<sup>31</sup> CAIS at 8; IUC at 35; Juno at 9. See also AOP at 4.

<sup>32</sup> *Amendment of Part 63 of the Commission's Rules to Provide for Notification by Common Carriers of Service Disruptions*, CC Docket No. 91-273, *Report and Order*, 7 FCC Rcd 2010 (1992), *Second Report and Order*, 9 FCC Rcd 3911, paras. 10-13, 44-46, 58 (1994), *recon.*, 10 FCC Rcd 11 764, paras. 18-29 (1995).

<sup>33</sup> Public Notice, *Clarification of Interim Outage Reporting*, 7 FCC Rcd 3589 (1992), at 3589.

climbs above normal thresholds, the ILECs take steps to attempt to ensure that an outage does not occur.

Network reliability is protected in our territories because we are dedicated to ensuring the integrity of our networks. This protection, and the substantial uncompensated expenditures that it requires, by no means indicates the lack of a congestion problem.

**G. New Packet Data Services Of ILECs And Their Competitors Are Not Enough To Overcome Congestion Problems So Long As The ESP Exemption Subsidizes Use Of The PSTN For Internet Traffic**

Several parties assert that the answer to congestion concerns is the offering of new packet data services that move Internet traffic off the PSTN.<sup>34</sup> Hardy & Ellison and Juno specifically mention SWBT's Internet/Intranet Transport Service ("ITS") in this regard. Similarly, some parties state that local competition can help bring new data services which will divert traffic from the PSTN.<sup>35</sup>

We agree that new data services of ILECs and their competitors could potentially solve the congestion problem. We disagree, however, with those that say this solution has not been fulfilled because of a lack of desire by the ILECs<sup>36</sup> or a lack of local competition.<sup>37</sup> SWBT's ITS<sup>38</sup> and Pacific Bell's pending Data Access Gateway<sup>39</sup>

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<sup>34</sup> AOP at 6-7; Hardy & Ellison at 10-11; Internet Consumer Parties at 11 & 13; Juno at 7-8; WorldCom at 20-21.

<sup>35</sup> See California PUC at 3; MCI at 10; Nortel at 12; and USIPA at ii.

<sup>36</sup> Internet Consumer Parties at 11 & 13.

<sup>37</sup> MCI at 10; USIPA at ii.

<sup>38</sup> SWBT at 6-9.

<sup>39</sup> Pacific Telesis Group's March 1997 Internet White Paper at 23-25.



show the ILEC desire for, and commitment to, these solutions. Similarly, the status of local competition in California shows that there is certainly no shortage of competition. Today, at least 110 CLECs have applied to the California CPUC to provide local exchange services through resale or facilities-based services; over 80 such certificates have been granted. These new entrants already serve over a quarter of a million lines, and Pacific Bell is currently losing thousands of customers to them a month. In addition, in its traditional five state area, SWBT has negotiated and signed 89 agreements with 50 different competitors.

ILEC data services and the existence of fierce competition are not enough to solve the congestion problem. They are important, but their effect on movement of traffic off the PSTN will be minimal so long as the ESP exemption creates a strong incentive for ESPs to continue using the local business services of the PSTN.<sup>40</sup>

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<sup>40</sup> Kevin Werbach of the Commission's Office of Plans and Policy recently stated: "Most LECs have existing tariffed service offerings that route data through data networks using frame relay or switched multimegabit data service (SMDS) rather than analog modem connections to a local switch. However, ISPs have rarely taken these services, because they believe they will increase their costs over their current practice of purchasing large numbers of business lines."...."More generally, the deployment of high-bandwidth internet access technologies may be constrained by the ability of competitors to take advantage of the existing network, either by purchasing existing tariffed services from local exchange carriers, or by leasing pieces of the network and combining them in new ways"...."Technology and business models should drive pricing, rather than the reverse." Kevin Werbach, "Digital Tornado: The Internet and Telecommunications Policy," March 1997, OPP Working Paper Series, at 69, 78, 83 ("Kevin Werbach's March 1997 Internet White Paper").